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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/781,135	02/17/2004	Bernd Schulze	RUM223	3380
7590 HORST KASPER 13 FOREST DRIVE WARREN, NJ 07059			EXAMINER BONK, TERESA	
			ART UNIT 3725	PAPER NUMBER
			MAIL DATE 12/26/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/781,135

Applicant(s)

SCHULZE, BERND

Examiner

Teresa M. Bonk

Art Unit

3725

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 31 October 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 18-34 is/are pending in the application.
- 4a) Of the above claim(s) 18 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 19-34 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on October 31, 2007 has been entered.

### ***Claim Rejections - 35 USC § 103***

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 19-20, 23-26, and 29-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bignucolo et al. (US Patent 6,513,243) in view of Meredith (US Patent 5,074,555). Bignucolo et al. discloses a method of producing a hollow molded part made of a metallic material in a shape of an A-column having a tubular starting part (1) with an outer diameter and a starting wall thickness (Figure 1). Initially the tubular starting part reduces, by radial deformation performed by rolling (fluoforming, rollers, Column 2, lines 32-35), a second conical region (5) and a third cylindrical region (4) to a smaller diameter (Column 2, lines 36-41) to form a mold blank (a hollow first intermediate product 2). The mold blank's second conical region is then bent under axial pull tension to a curvature (Column 2, lines 43-55, Figure 3). A

final forming step is performed by inner high pressure metal forming (hydroforming) in the first and in the second regions (Column 2, lines 66-67 & Column 3, 1-4; Figure 6).

Bignucolo et al. discloses the invention substantially except for an increased wall thickness relative to the starting wall thickness in the second and third regions. Meredith discloses a method of radially deforming a tubular shaft having second (61) and third (62) regions with an increased wall thickness (22) relative to the starting wall thickness (20) (Column 3, line 55-56 and Figures 2a-b). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made that Bignucolo et al.'s radial deformation step can increase the wall thickness of the second and third region because "it is desirable to design (a tubular part) without the excessive weight (and) having a wall thickness along the tapered length (second region) and the tip portion (third region) able to provide a desired weight distribution and to withstand the forces exerted on the shaft tip (third region)" (Column 1, lines 45-50).

Regarding claim 24, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have the particular numerical values claimed depending on the characteristics desired for the finished product, they are not a patentable distinction.

Regarding claim 33, taking into consideration the lack of numerical values for the larger loads, one of ordinary skill in the art at the time the invention was made could consider this limitation broadly and consider that any additional load subjected to the workpiece would satisfy the claim.

4. Claims 21- 22 and 27-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bignucolo et al. and Meredith as applied to claims 19-20 and 23-24 above, and further in view of Self et al. (US Patent 2,267,623). The combination of Bignucolo et al. and Meredith disclose the

invention substantially except for an intermediate annealing prior to the pressure forming and annealing between the deformation step and the pressure forming step. Self et al. discloses an intermediate annealing after a deformation step (Column 2, lines 35-39). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to anneal the product in order to prevent "failure of the blank" (Column 5, lines 69-70) in a manner such as cracking or breaking before further forming is performed.

#### ***Response to Arguments***

5. Applicant's arguments filed October 31, 2007 have been fully considered but they are not persuasive.

In response to Applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Particularly, on page 12, the Applicant states the Bignucolo reference lacks "larger wall thicknesses." The Examiner points out that this particular language is not in the claim and to meet that particular claim limitation of "increased wall thickness" a 35 U.S.C. 103(a) rejection is utilized in which the teaching reference Meredith discloses increased wall thickness. With regards to the Applicant's mentioning of "mount(ing) additional reinforcement device," the Examiner points out that references may often disclose additional features or steps. Therefore, as long as a reference teaches the claimed feature or step the reference is then considered to meet the claim limitations.

Also on pages 13-14 the Applicant appears to be arguing that Meredith and Self references are nonanalogous to the Bignucolo reference, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, the Meredith reference is pertinent to the particular problem solving area of deforming a hollow tubular workpiece; while the Self reference is pertinent to the particular problem solving area of annealing.

### ***Conclusion***

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Teresa M. Bonk whose telephone number is (571) 272-1901. The examiner can normally be reached on M-F 9:00 AM - 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Banks Derris can be reached on (571) 272-4419. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Teresa M. Bonk  
Examiner  
Art Unit 3725



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